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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/620,544	07/21/2000	Petro Estakhri	38979-11CPA2	2400

27728 7590 05/23/2003

LAW OFFICES OF IMAM
111 N. MARKET STREET, SUITE 1010
SAN JOSE, CA 95113

EXAMINER

BRAGDON, REGINALD GLENWOOD

ART UNIT	PAPER NUMBER
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2188

DATE MAILED: 05/23/2003

24

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/620,544

Applicant(s)

ESTAKHRI ET AL.

Examiner

Reginald G. Bragdon

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 April 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 19+9/n/00
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- Other: _____

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 09 April 2003 has been entered.

Information Disclosure Statement

2. The Information Disclosure Statements received 17 September 2002 and 26 February 2003 have been considered. Please see the attached PTO-1449(s).

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 2-15 are rejected under 35 U.S.C. 102(e) as being anticipated by Hasbun et al. (5,586,285).

As per claims 2, 3, 7, 11, and 15, Hasbun et al. teaches, with reference to figures 1 and 2, a host CPU 52, a solid state disk controller 64, and a FLASH memory array 62 (“nonvolatile memory storage”) made up of a plurality of blocks, each comprised of a plurality of sectors (see

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figure 1; column 2, lines 39-42; and column 16, lines 62-64). With reference to figure 9, for a write operation received from the host to write a sector ("one or more sectors") to the FLASH memory array, the updated sector is written (step 256) to another block (selected by an allocate free physical memory operation, step 250). No other sectors stored in the old block are moved, and the header information for the updated block is modified, as is the translation table pointing to the most recent version of the block (step 258). Therefore, Hasbun et al. teaches only writing the updated sector without moving the remaining sectors as described in column 16, line 59, to column 17, line 7.

As per claims 4, 8, and 12, it is inherent that further write commands to further sectors would result in the process described for claims 3, 7, and 11, being repeated.

As per claims 5-6, 9-10, and 13-14, previous sector information will be moved at a later time, such as when the previous sector information is erased.

Response to Arguments

5. Applicant's arguments filed 09 April 2003 have been fully considered but they are not persuasive.

With respect to the Hasbun et al. reference, Applicant argues on page 5 of the response that it is not clear where Hasbun et al. discloses blocks. Hasbun et al. teaches blocks, for example, in figure 1 and column 16, lines 62-64. A block having two or more sectors is described in column 2, lines 39-42.

Applicant also argues that Hasbun et al. does not teach writing "one or more, but not all" sectors of a particular block without moving the remaining sectors that are not being updated or

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rewritten. However, Hasbun et al. does teach only writing the updated sector without moving the remaining sectors as described in column 16, line 59, to column 17, line 7. As described in this passage, sufficient free memory within the FLASH array is allocated to store the sector of data, which is written to the allocated memory. No movement of remaining sectors is described.

Conclusion

6. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

The fax phone numbers for the organization where this application or proceeding is assigned are as follows:

(703) 746-7238	(After Final Communications)
or	
(703) 746-7239	(Official Communications)
(703) 746-7240	(For Status inquiries, draft communications)
and/or	
(703) 746-5693	(Use this FAX#, only after approval by the Examiner, for "INFORMAL" or "DRAFT" communications. An Examiner may request that a formal page/amendment be faxed directly to them on occasion).

Hand-delivered responses should be brought to Crystal Park II, 2121
Crystal Drive, Arlington, VA., Fourth Floor (receptionist).

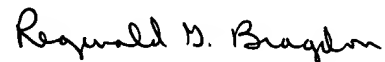
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7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Reginald G. Bragdon whose telephone number is (703) 305-3823. The examiner can normally be reached on Monday-Thursday from 7:00 AM to 4:30 PM and every other Friday from 7:00 AM to 3:30 PM.

The examiner's supervisor, Matthew Kim, can be reached at (703) 305-3821.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

RGB
May 19, 2003


Reginald G. Bragdon
Primary Patent Examiner
Art Unit 2188